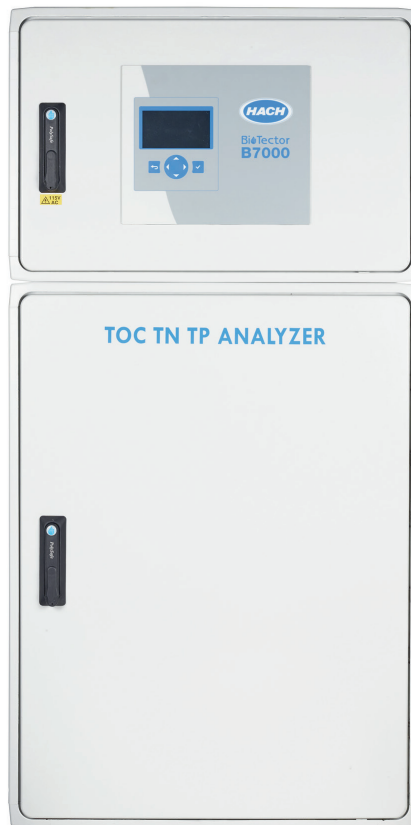


Hach BioTector B7000 Online TOC/TN/TP Analyser



Applications

- Industrial wastewater influent and effluent
- Industrial process monitoring
- Municipal wastewater influent
- Storm water / River water

A single analyser for Carbon contamination and Nitrogen/Phosphorus nutrient levels in water

Contamination levels in water impact treatment and re-use decisions. With data on contamination plus nutrient levels water managers can make the most efficient and cost-effective decisions for treatment and reuse of important water supplies.

- Improve treatment and re-use decisions with accurate and complete water quality
- Reduce costs on nutrient dosing while protecting critical treatment facilities with accurate C:N:P ratios
- Spend more time managing the plant and less time collecting data with a robust, industrially designed online analyser to monitor TOC, TN, and TP parameters
- Detect product loss quickly to save valuable product, and minimise risk of noncompliance by preventing excessive contamination releases to the wastewater treatment plant

The Hach[®] TOC analyser completes a full breakdown of each process sample to deliver trusted results.

Improve wastewater treatment process

Capture changes in water quality with a direct analysis of Total Organic Carbon (contamination), Total Nitrogen and Total Phosphorus in the most challenging samples.

Reduce the environmental footprint

Comprehensive information about your incoming sample composition enables improved process control. Knowing TOC + TN and TP allows you to decrease utilities usage and related costs. Optimised processes will reduce effluent environmental impact and minimise the risks of fines and reputation damage.

Protect your WWTP and WWRP

TOC is commonly used as a fast, reliable water analysis metric for water quality. TOC levels are often correlated to lagging water quality metrics such as Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD).

Superior reliability

With a certified 99.86% uptime critical process information is available when you need it most. Maintenance in most applications is done 2x per year.

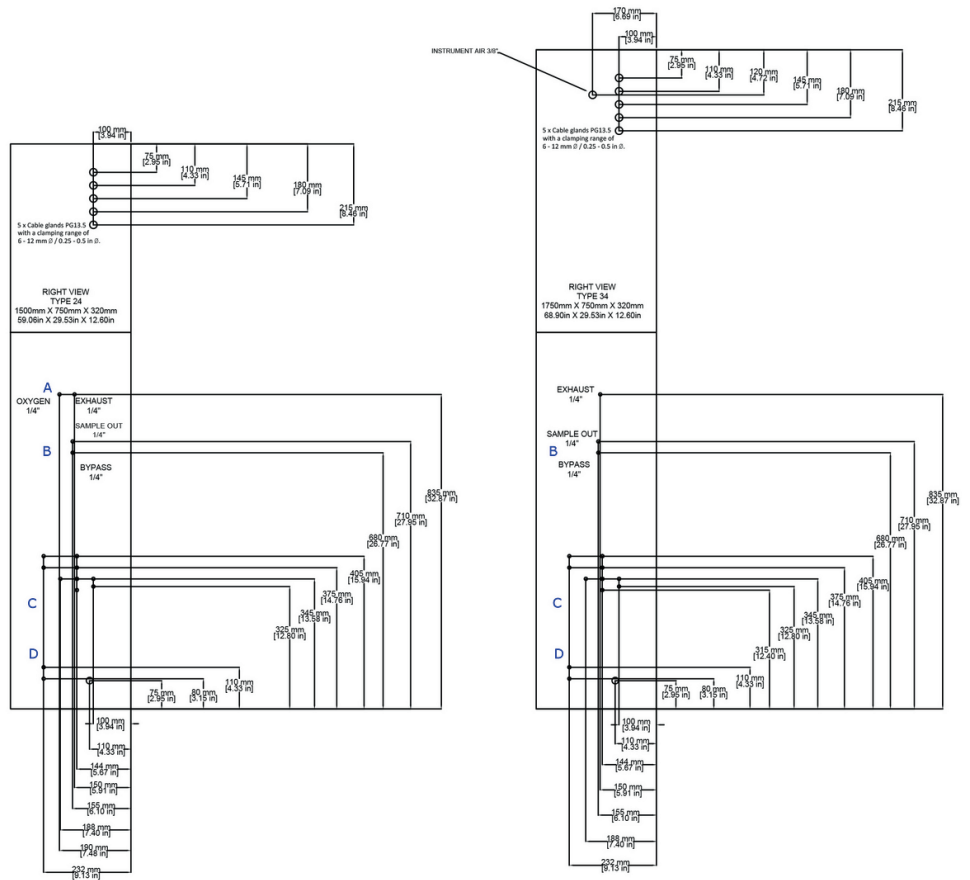
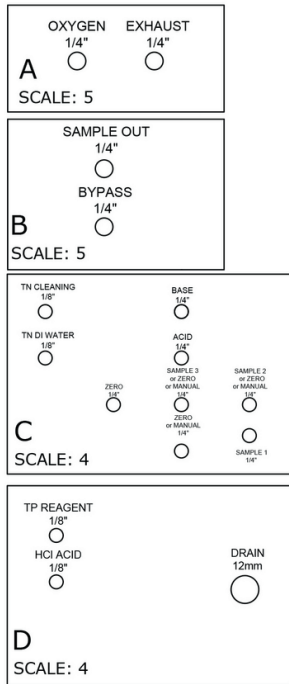
Technical Data*

Parameter	Direct measurement of TOC, TIC, TC, TN, TP; COD, BOD via correlation; VOC via calculation
Measurement method	TOC: NDIR measurement of CO ₂ after oxidation TN: direct photometric analysis of Nitrate after oxidation TP: colorimetric analysis of Phosphate with standard Vanadomolybdophosphoricacid method after oxidation
Oxidation method	Innovative Two-Stage Advanced Oxidation Process (TSAO) using Hydroxyl Radicals
Measuring range	0 - 10000 mg/L C/N/P
Range selection	Automatic or Manual Range Selection
Multi-Stream	Valves for up to 3 streams with up to six 4-20 mA signals The number of available outputs depends on the manual stream configuration.
Repeatability	TOC: ±3% of reading or ±0.3 mg/L C, whichever is greater TN: ±3% of reading or ±0.2 mg/L N, whichever is greater TP: ±3% of reading or ±0.2 mg/L P, whichever is greater
Cycle time	From 10 minutes, depending on range and application
Permissible Chloride range	Up to 30%
Communication: digital	Modbus RTU, Modbus TCP/IP & Profibus (when the Profibus option is selected, the digital output signals are sent through the Profibus converter with its specific communication protocol)
Enclosure waterproof rating	IP44; optional IP54 with air purge
EExp / Hazardous Location	Certification options are available to European Standards (ATEX Zone 2 - maximum T3 for TP analyser) and North American Standards (Class I Division 2)
Sample inlet temperature	2 - 60 °C
Ambient temperature	5 - 40 °C
Humidity	5 - 85 % (non-condensing)
Particle size	Up to 2 mm, soft particulates
Data storage	Previous 9999 analysis data on screen in the microcontroller memory and storage of data archive for the lifetime of the analyser in the SD/MMC card. Previous 99 fault data on screen in the microcontroller memory and storage of fault data archive for the lifetime of the analyser in the SD/MMC card.
Display	High contrast 40 character x 16 line backlit LCD with LED backlight
Power requirements (Voltage)	115 V AC / 230 V AC
Power requirements (Hz)	50/60 Hz
Service interval	6 months service intervals
Dimensions (H x W x D)	1500 mm x 750 mm x 320 mm
Weight	90 - 120 kg Enclosure weight may change depending on system optional features.

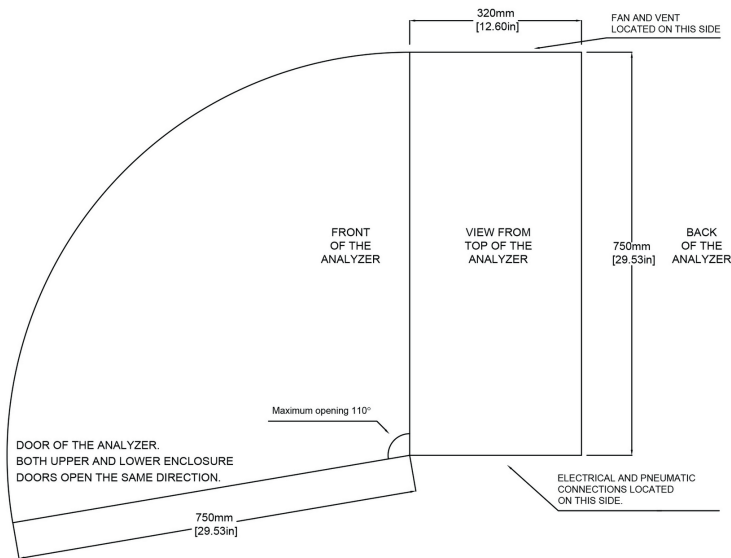
*Subject to change without notice.

Dimensions

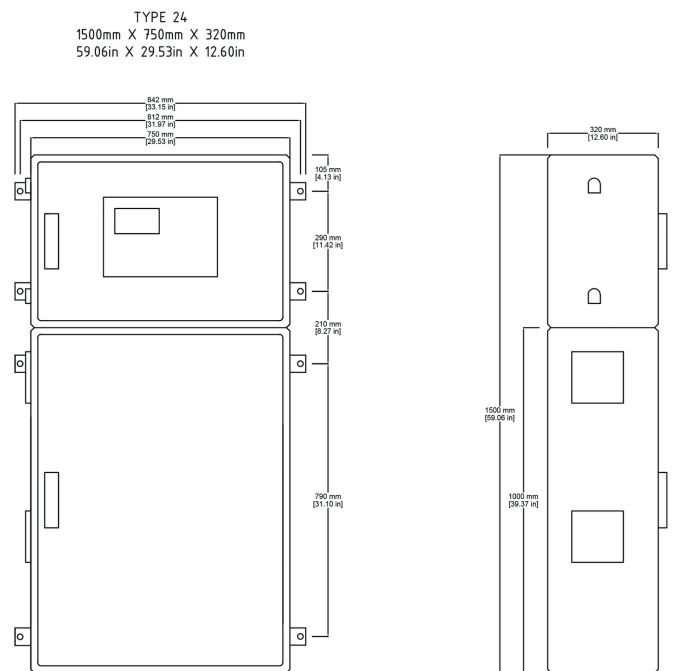
TOC/TN/TP connections



Access requirements



Enclosure



Order Information

Analysers

B4RDDF052AEC AE2	B7000 TOC/TN/TP Analyser, 1 channel, 230 V, 0 - 25 mg/L
B4REDF052AEC AE2	B7000 TOC/TN/TP Analyser, 1 channel, 230 V, 0 - 50 mg/L
B4RFDF052AEC AE2	B7000 TOC/TN/TP Analyser, 1 channel, 230 V, 0 - 100 mg/L
B4RGDF052AEC AE2	B7000 TOC/TN/TP Analyser, 1 channel, 230 V, 0 - 500 mg/L
B4RHDF052AEC AE2	B7000 TOC/TN/TP Analyser, 1 channel, 230 V, 0 - 1000 mg/L
B4RKDF052AEC AE2	B7000 TOC/TN/TP Analyser, 1 channel, 230 V, 0 - 10000 mg/L

There are additional options available. Please contact Hach for more details.

Accessories

12-AIR-002	Oxygen Concentrator, 230 V, 50 Hz, with compressor
19-OGS-102	Oxygen Concentrator, 230 V, 50 Hz, without compressor
10-SMC-001	Air supply filter pack
19-KIT-119	BioTector TOC/TN/TP Dual Cell 6 month Service Kit
19-KIT-110	KNF300 pump 6 month Service Kit
19-KIT-120	BioTector TOC/TN/TP Dual Cell 12 month Service Kit
19-KIT-111	KNF300 Pump 12 month Service Kit

Reagents

2985462	BioTector acid reagent with catalyst
2985562	BioTector base reagent 1.2 N sodium hydroxide
2985662	BioTector TN cleaning solution, 18.9 L
2986162	BioTector Total Phosphorus reagent, 18.9 L
27362	Deionized water, 18.9 L

Be confident with Hach Service

Start-Up/Commissioning: Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

Service Agreement: Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.